lec. (5) (1)

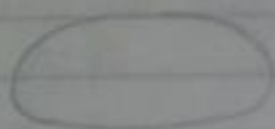
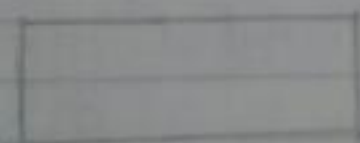
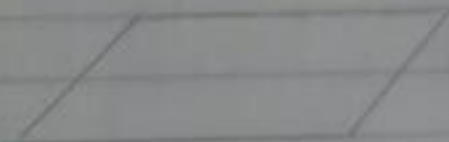
16/3/2013

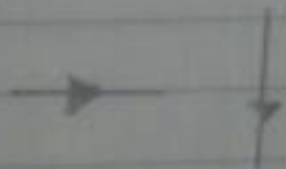
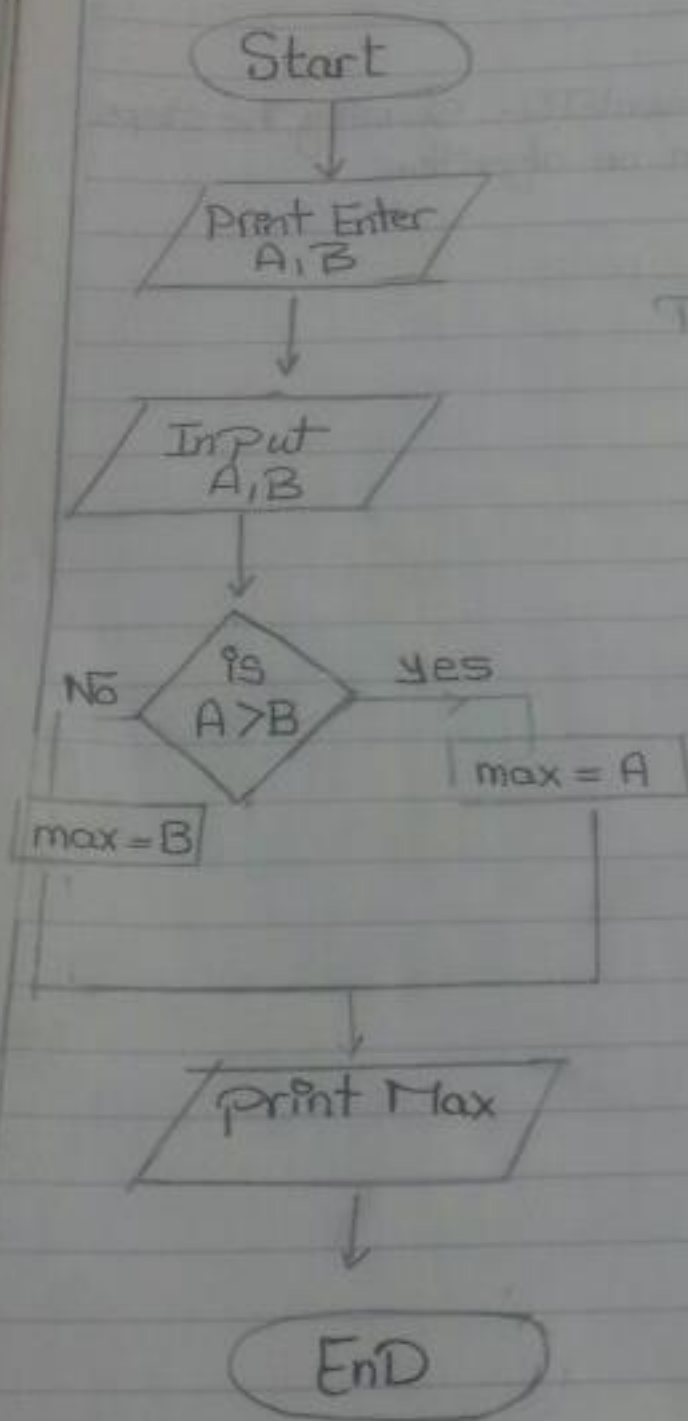
Flow Chart

_Basic C_Program

Flowchart → is a graphical representation showing the steps of performing a Computer program or an algorithm

* Flow Chart elements

Start, end =

Calculation

Input or output

decision

flow

(2)
* Draw a flow chart to find the maximum bet. A, B
Start
Print Enter A, B
Input A, B
is A > B
No
yes
max = A
max = B
Print Max
EnD
A
B
max
To put instructions
input the user variable
A, B

* Run FlowChart:

1. Enter A, B

2. A → 15, B → 7

3. Check Condition

4. Max = A

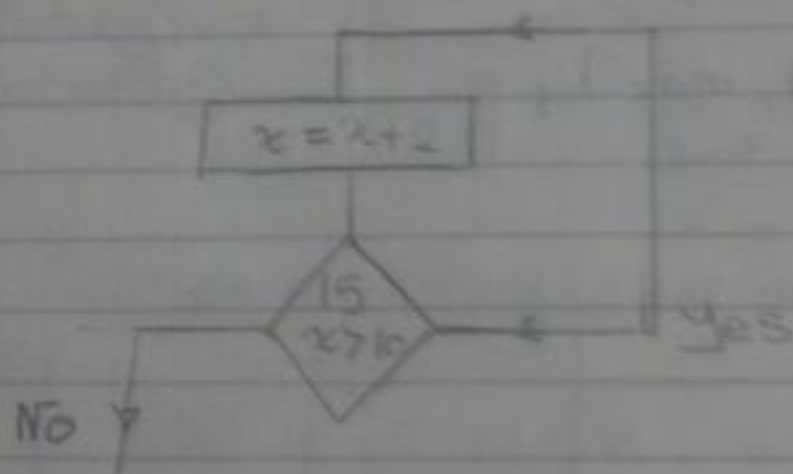
5. 15

⇒ The Desicion Can make aloop, if it goes up word

$x = x + 1$

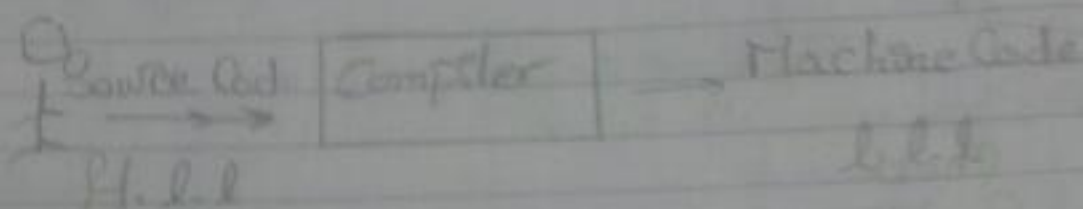
$x > 15$ (15)

Yes

No

C is one of the programing language

* Write a program in C language (high level language) this language has rules and grammer, it is then complied, translated into (low level language) called "Machine Code" which is easy to for Computer

Source Code → Compiler → Machine Code

H.L.L — L.L.L

```
# Include <stdio.h>      → Bdayt el Program
int main ()
{ int a, b, max ;
  printf ("Enter a, b\n") ;
  Scanf ("%d %d", &a, &b) ;
  * if (a>b)
        max = a ;
  else
        max = b ;
Printf ("Max = %d, max") ;
```

lazem yeen fe space ben el kalam ... space.

Enter a, b
5 7
space
tab
newline
Max =

A
B

(\n)

\t

A B

\n = new line
\t = Tab
\b = back Space
\r = back to start of line
\N = no. lines

%d = Integer ارقام صحيحة — الارقام اللي هنطبعها Print
%f = float كسري
%c = character حرف واحد
%s = String كلمات
%lf = double كسر كبير

⇒ Each line ends with ;

⇒ C Case Sensitive : Print main Scan f else Small letter

⇒ There are 3 Variables
a   b   max
A

* All variables must be defined first.

⇒ int a ;
int b ; → m3naha enha 3arft variable esmo a or b
int max ;

lw haktbhom wara b3d mayn f3sh Afsal benhom ;
int a ; int b ; int max (✓)
int a ; b → (✗)

⇒ In Assignment Statment : we have variable to left, expression to right

int x = 5 , y = 10 , z = 3 ;
x = y + 4 * z → Value gdeda ld x 2yn kant kemt el x de bkam

Include ≡ Add to this file

Stdio.h ≡ Standard input output header